

6. CUMULATIVE EFFECTS

This section discusses potential impacts resulting from other facilities, operations, and activities that in combination with potential impacts from the proposed project may contribute to cumulative impacts. Cumulative impacts are impacts on the environment that result from the incremental impact of the proposed project when added to other past, present, and reasonably foreseeable future actions regardless of the agency (federal or non-federal) or person that undertakes such other actions (40 CFR Part 1508.7). An inherent part of the cumulative effects analysis is the uncertainty surrounding actions that have not yet been fully developed. The Council on Environmental Quality (CEQ) regulations provide for the inclusion of uncertainties in the analysis, and state that “(w)hen an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an EIS and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking” (40 CFR Part 1502.22). The CEQ regulations do not say that the analysis cannot be performed if the information is lacking. Consequently, the analysis contained in this section includes what could be reasonably anticipated to occur given the uncertainty created by the lack of detailed investigations to support all cause and effect linkages that may result from the proposed project, and the indirect effects related to construction and long-term operation of the facility.

Because cumulative impacts accrue to resources, the analysis of impacts must focus on specific resources or impact areas as opposed to merely aggregating all of the actions occurring in and around the proposed facility and attempting to form some conclusions regarding the effects of the many unrelated actions. Narrowing the scope of the analysis to resources that would be expected to experience a reasonable likelihood of accrued foreseeable impacts supports the intent of the NEPA process, which is “to reduce paperwork and the accumulation of extraneous background data; and to emphasize real environmental issues and alternatives” [40 CFR Part 1500.2(b)]. Each resource analyzed has its own spatial (geographic) boundary, although the temporal boundaries (time frame) can generally be assumed to equal the life expectancy of the proposed project.

The proposed project would reduce SO₂, NO_x, HCl, HF, SO₃, and Hg air emissions, which would improve overall air quality and slightly decrease existing cumulative impacts in the region. Due to the reduction in emissions of SO₂, NO_x, HCl, HF, and SO₃, (which are associated with acid deposition) and Hg (which adversely affects humans and biota), the proposed project would slightly decrease existing cumulative impacts to surface waters, wetlands, and ecological resources at the local and, quite possibly, regional scales.

Project construction and operation would have slight socioeconomic impacts, and could contribute to cumulative impacts on the area's socioeconomic resources. The most noticeable of these cumulative impacts would likely result if the timing of the peak construction work force would coincide with the region's summer tourist season. These activities could conceivably combine to adversely affect the availability and cost of tourist lodging facilities, the effectiveness of wastewater treatment services, and the flow and safety of traffic on State Highway 14. However, such cumulative impacts, if they occur, would more likely be imperceptible and would be temporary, occurring during only a small portion of the 12-month construction period.

Because negligible or no impacts from the proposed project would be experienced by remaining resources, no cumulative impacts would be expected to these resources. Further, few new facilities, operations, or activities that could result in cumulative impacts are anticipated for the vicinity of Greenidge Station in the same time frame as the proposed project. The New York State Department of Transportation has no ongoing or planned road construction activities for State Highway 14 or for any other roads in Yates County (Bill Piatt, New York State Department of Transportation Region 6, personal communication to Bo Saulsbury, ORNL, February 11, 2004). The only ongoing or potential project known to the Yates County Industrial Development Agency is the possibility of an additional tourist lodging facility (Steve Isaacs, Yates County Industrial Development Agency, personal communication to Bo Saulsbury, ORNL, March 10, 2004).